Chapter 3 Narrative Scenarios

FACTOR	SCENARIO 1 CURRENT TRENDS	SCENARIO 2 RESOURCE SUSTAINABILITY	SCENARIO 3 RESOURCE INTENSIVE
Total Population	DOF	DOF	Higher than DOF
Population Density	DOF	Higher than DOF	Lower than DOF
Population Distribution	DOF	DOF	Higher Inland & Southern Lower Coastal & Northern
Commercial Activity	Current Trend	Increase in Trend	Increase in Trend (as in 2)
Commercial Activity Mix	Current Trend	Decrease in High Water Using Activities	Increase in High Water Using Activities
Total Industrial Activity	Current Trend	Increase in Trend	Increase in Trend (as in 2)
Industrial Activity Mix	Current Trend	Decrease in High Water Using Activities	Increase in High Water Using Activities
Total Crop Area	Current Trend	Level Out at Current Crop Area	Level Out at Current Crop Area
Crop Unit Water Use	Current Trend	Decrease in Crop Unit Water Use	Increase in Crop Unit Water Use
Environmental Water-Flow Based	Current Trend	High Environmental Protection	High Environmental Protection
Environmental Water-Land Based	Current Trend	High Environmental Protection	High Environmental Protection
Naturally Occurring Conservation	NOC Trend in MOUs	Higher than NOC Trend in MOUs	Lower than NOC Trend in MOUs
Urban Water Use Efficiency	All Cost Effective BMPs in Existing MOUs Implemented by Current Signatories (present commitments)		
Ag Water Use Efficiency	All Cost Effective BMPs in Existing MOUs Implemented by Current Signatories (present commitments)		

Quantified Narrative Scenarios

FACTOR		INITIAL CONDITIONS	SCENARIO 1 CURRENT TRENDS	SCENARIO 2 RESOURCE SUSTAINABILITY	SCENARIO 3 RESOURCE INTENSIVE	NOTES
		(2000)	(2030)	(2030)	(2030)	
Total Population		34.1 million	48.1 million	48.1 million	52.3 million*	* Previous DOF forecast
Population Density		36% MF housing	36% MF housing	46% MF housing	31% MF housing	
Persons per Household (SF / MF)		3.13 (SF) / 2.41 (MF)	3.13 (SF) / 2.41 (MF)	3.13 (SF) / 2.41 (MF)	3.13 (SF) / 2.41 (MF)	
Population Distribution	Inland & Southern*	25.8 million	37.3 million	37.3 million	41.1 million (+25% growth rate)	Inland & Southern: SR, SJ, TL, CC, CR, SL
	Coastal & Northern*	8.3 million	10.8 million	10.8 million	11.2 million (+16% growth rate)	Northern & Coast: NC, SF, CC, NL
Commercial Activity		2000 Employees	2030 Employees	2030 Employees	2030 Employees	Awaiting Data
Commercial Activity Mix		2000 Activity Mix	To be implemented	To be implemented	To be implemented	Effects in per unit water use
Total Industrial Activity		2000 Employees	2030 Employees	2030 Employees	2030 Employees	Awaiting Data
Industrial Activity Mix		2000 Activity Mix	To be implemented	To be implemented	To be implemented	Effects in per unit water use
Total Crop Area (Irrigated - ICA)		9.5 Mil Acres	8.5 Mil Acres (-10.4%)	9.5 Mil Acres	9.5 Mil Acres	
Irrigated Land Area (ILA)		9.0 Mil Acres	7.7 Mil Ac (-13.6%)	8.4 Mil Ac (-6.9%)	7.7 Mil Ac (-13.6%)	
Multi-cropped Area (MA/ILA)		6%	10%	14%	23%	MA/ILA set to satisfy ICA & ILA
Crop Unit Water Use		2000 Level	Included in Irrigation Applied Water	Included in Irrigation Applied Water	Included in Irrigation Applied Water	
Environmental Water-Flow Based		2000 Env. Demand	+ 100% ED	+ 150% ED	+ 100% ED	ED: Environemental Defense Estimates (December 2003)
Environmental Water-Land Based		2000 Env. Demand	+ 100% ED	+ 100% ED	+ 100% ED	
Naturally Occurring Conservation		2000 Level	Included in Per Unit Water Use	Included in Per Unit Water Use	Included in Per Unit Water Use	
Urban Water Use Efficiency		2000 Level	Included in Per Unit Water Use (below)			
Ag Water Use Efficiency		2000 Level	Included in Irrigation Applied Water (below)			
Domestic Per Unit Water Use		2000 WUC	- 10%	- 20%	- 5%	WUC = Water use coefficient
Commercial Per Unit Water Use		2000 WUC	- 10%	- 20%	- 5%	
Industrial Per Unit Water Use		2000 WUC	- 10%	- 20%	- 5%	
Irrigation Applied Water		2000 AW	- 5%	- 10%	2000 AW	AW = Applied Water